

## FIRE PREVENTION BUREAU INFORMATION SHEET

*The items listed are basic information only. Additional requirements may apply.* Ordinance # 16.01.012  
Effective Date: July 1, 2019

# ALCOHOL BASED HAND RUBS

Alcohol Based Hand Rubs (ABHRs) are an alcohol-containing preparation designed for application to the hands for reducing the number of viable organisms on the hands and containing ethanol or isopropanol in an amount not exceeding 95 percent by volume. The percentage of alcohol typically ranges from 60% to 70%, and this alcohol level causes ABHRs to be placed into Flammable Liquid categories by fire safety standards adopted by the City. Most ABHR's are s class IC flammable liquid. A permit is required for any indoor storage greater than 5 gallons.



## Definitions

**Control Area:** Spaces within a building where quantities of hazardous materials not exceeding the maximum allowable quantities per control area are stored, dispensed, used or handled.

### **Flammable and Combustible Liquids:**

- **Class IA** flammable liquids having a flash point below 73° F (23° C) and having a boiling point of 100° F (38° C).
- **Class IB** flammable liquids having a flash point below 73° F (23° C) and having a boiling point at, or above, 100° F (38° C).
- **Class IC** flammable liquids having a flash point at, or above, 73° F (23° C) and below 100° F (38° C).
- **Class II** combustible Liquids having a closed cup flash point at or above 100°F (38°C) and below 140°F (60°C).
- **Class IIIA** combustible liquids having a closed cup flash point at or above 140°F (60°C) and below 200°F (93°C).
- **Class IIIB** combustible liquids having closed cup flash points at or above 200°F (93°C).

**Flash Point:** The minimum temperature in degrees Fahrenheit at which a liquid will give off sufficient vapors to form an ignitable mixture with air near the surface or in the container, but will not sustain combustion.

## **REQUIREMENTS**

### **STORAGE QUANTITY LIMITATION:**

The maximum allowable quantity per control area is 120 gallons for Class IB, Class IC, and Class II liquids. The quantity shall be increased by 100% in buildings equipped with an approved automatic sprinkler system. Quantity shall be increased by 100% when stored in an approved storage cabinet.

Fire protection and container storage arrangements shall be in accordance with the following table:

<b>Maximum Storage Height in Control Area (feet)</b>			
<b>Type of Liquid</b>	<b>Non-Sprinklered Area</b>	<b>Sprinklered Area</b>	<b>Sprinklered with In-Rack Protection</b>
Class IA	4	4	4
Class IB	4	8	12
<b>Class IC</b>	<b>4</b>	<b>8</b>	<b>12</b>
Class II	6	8	12
Class IIIA	8	12	16
Class IIIB	8	12	20

- **Combustible commodities shall not be stored above flammable and combustible liquids.**

#### **DISPENSER LOCATIONS FOR USE:**



The use of wall-mounted dispensers containing alcohol-based hand rubs classified as Class I or II liquids shall be in accordance with all of the following

1. The maximum capacity of each dispenser shall be 68 ounces.
2. The minimum separation between dispensers shall be 48 inches.
3. The dispensers shall not be installed above, below, or closer than 1 inch to an electrical receptacle, switch, appliance, device or other ignition source. The wall space between the dispenser and the floor or intervening counter top shall be free of electrical receptacles, switches, appliances, devices or other ignition sources.
4. Dispensers shall be mounted so that the bottom of the dispenser is not less than 42 inches and not more than 48 inches above the finished floor.

Automatically activated “touch free” alcohol-based hand-rub dispensing devices are allowed, as long as dispensers are tested each time a new refill is installed, and they are designed and operate in a manner that ensures accidental or malicious activations of the dispensing device are minimized.

#### **WHOLESALE AND RETAIL USES:**

Flammable and combustible liquids in wholesale and retail sales uses shall be in accordance with the following:



Containers for Class I liquids shall be metal.

- Exception: In sprinklered buildings, an aggregate quantity of 120 gallons of water-miscible Class IB and Class IC liquids is allowed in nonmetallic containers, each having a capacity of 16 ounces or less.

Containers for Class I liquids shall not exceed a capacity of 5 gallons.

- Exception: Metal containers not exceeding 55 gallons are allowed to store up to 240 gallons of the maximum allowable quantity per control area of Class IB and IC liquids. The building shall be equipped throughout with an approved automatic sprinkler system and shall not be located in areas open to the public.